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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,362	12/27/2001	Yusaku Katoh	01848/LH	7805

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EXAMINER

MAKI, STEVEN D

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 03/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/033,362

Applicant(s)

KATOH ET AL.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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- 1) Figures 15 and 16 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 2) The abstract of the disclosure is objected to because the abstract should be one paragraph. Correction is required. See MPEP § 608.01(b).
- 3) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4) Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, it is unclear if this claim requires the tire to be a cushion tire and to have the specified aspect ratio. In claim 1 line 3, it is suggested to change "a tire" to --the tire--.

- 5) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7) Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jarman (US 5139066).

Jarman discloses a non-pneumatic tire 10 on a rim 12, 13 wherein passageways (holes) 37 are formed in one side surface of the tire and along the circumferential direction and passageways (holes) 39 are formed in the other side surface of the tire and along the circumferential direction. See figure 2. The illustrated tire has an aspect ratio of about 40%.

As to claim 1, the claimed tire is anticipated by the tire of Jarman. In any event: As to claim 1, it would have been obvious to one of ordinary skill in the art to provide the tire of Jarman such that it has an aspect ratio of 15-80% since Jarman shows the tire as having a low aspect ratio (an aspect ratio of less than 50%). See figure 2.

8) Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jarman (US 5139066) as applied above and further in view of Haydon et al (WO 96/05917).

As to claims 2 and 3, it would have been obvious to provide the (holes) between adjacent tread grooves in the cushion tire of Jarman so that the number of tread grooves equals the number of (holes) passageways since (a) Haydon et al suggests using a tread pattern comprising alternating axial grooves connected by small size grooves in a cushion tire having holes so that the tire can be used on rough terrain (figure 3) and (2) Haydon et al teaches locating a hole on a side surface of a cushion

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tire such that the hole is between adjacent tread grooves (figure 3, figure 8). As to the claimed small size grooves, note the inclined narrow width central grooves which connect axial tread grooves in figure 3 of Haydon et al.

9) Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jarman (US 5139066) as applied above and further in view of Sweet (US 649775).

As to claim 5, it would have been obvious to provide the cushion tire of Jarman with the claimed inner transverse grooves since Sweet suggests forming transverse grooves on the inner surface of a cushion tire so that the base can contract lengthwise in applying the tire to a rim and thereby avoid stretching of the tread.

10) Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jarman (US 5139066) in view of Haydon et al (WO 96/05917) as applied above and further in view of Sweet (US 649775).

As to claims 8 and 9, it would have been obvious to provide the cushion tire of Jarman with the claimed inner transverse grooves since Sweet suggests forming transverse grooves on the inner surface of a cushion tire so that the base can contract lengthwise in applying the tire to a rim and thereby avoid stretching of the tread.

11) Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jarman (US 5139066) as applied above and further in view of Ippen et al (US 3957101) and/or Europe '350 (EP 28350).

As to claim 4, it would have been obvious to provide the cushion tire of Jarman with the claimed projections in order to improve support of the tire on the rim in view of Europe '350's teaching to shape the sidewalls of a cushion tire such that protrusions

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rest on rim flanges (figure 1) and/or Ippen's teaching to shape the sidewall of a cushion tire such that protrusions rest on a rim flange (figure 1).

12) Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jarman (US 5139066) as applied above and further in view of Ippen et al (US 3957101) and/or Europe '350 (EP 28350) as applied above and further in view of Sweet (US 649775).

As to claim 10, it would have been obvious to provide the cushion tire of Jarman with the claimed inner transverse grooves since Sweet suggests forming transverse grooves on the inner surface of a cushion tire so that the base can contract lengthwise in applying the tire to a rim and thereby avoid stretching of the tread.

13) Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jarman (US 5139066) in view of Haydon et al (WO 96/05917) as applied above and further in view of Ippen et al (US 3957101) and/or Europe '350 (EP 28350)..

As to claims 6 and 7, it would have been obvious to provide the tire of Jarman with the claimed projections in order to improve support of the tire on the rim in view of Europe '350's teaching to shape the sidewalls of a cushion tire such that protrusions rest on rim flanges (figure 1) and/or Ippen's teaching to shape the sidewall of a cushion tire such that protrusions rest on a rim flange (figure 1).

14) Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jarman (US 5139066) in view of Haydon et al (WO 96/05917) and further in view of Ippen et al (US 3957101) and/or Europe '350 (EP 28350) as applied above and further in view of Sweet (US 649775).

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As to claims 11 and 12, it would have been obvious to provide the cushion tire of Jarman with the claimed inner transverse grooves since Sweet suggests forming transverse grooves on the inner surface of a cushion tire so that the base can contract lengthwise in applying the tire to a rim and thereby avoid stretching of the tread.

Remarks

15) The remaining references are cited of interest.


16) No claim is allowed.

17) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki
March 13, 2003


STEVEN D. MAKI 3-13-03
PRIMARY EXAMINER
~~GROUP 1300~~
Av 1733